

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)



Applicant's or agent's file reference 42.1.78522	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA416)	
International application No. PCT/GB 03/05102	International filing date (<i>day/month/year</i>) 21.11.2003	Priority date (<i>day/month/year</i>) 21.11.2002
International Patent Classification (IPC) or both national classification and IPC C12Q1/68		
Applicant DIAGENIC AS et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of 64 sheets.

3. This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 04.06.2004	Date of completion of this report 25.02.2005
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Favre, N Telephone No. +49 89 2399-7363 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/GB 03/05102**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-71, 124-279 as originally filed
72-121 received on 14.01.2005 with letter of 12.01.2005

Claims, Numbers

1-37 received on 14.01.2005 with letter of 12.01.2005

Drawings, Sheets

1/11-11/11 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☒ furnished subsequently to this Authority in written form.
☒ furnished subsequently to this Authority in computer readable form.
☒ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☒ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/GB 03/05102**

5. ☒ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

see separate sheet

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application,
☒ claims Nos. 1-5, 6 (partially) and 7-36

because:

- ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):
☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):
☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
☒ no international search report has been established for the said claims Nos. 1-5, 6 (partially) and 7-36

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

- ☐ the written form has not been furnished or does not comply with the Standard.
☐ the computer readable form has not been furnished or does not comply with the Standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	37
	No: Claims	6
Inventive step (IS)	Yes: Claims	
	No: Claims	6,37
Industrial applicability (IA)	Yes: Claims	6,37
	No: Claims	

2. Citations and explanations

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/GB 03/05102**

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB 03/05102

Re Item I

Basis of the report

1. The sequence listing pages 1-285 filed with the letter of 07.04.2004 **do not form part of the application** (Rule 13ter.1(f) PCT). The references to names found only on said sequence listing pages (which do not form part of the application), which reference have been introduced into the set of claims and on amended pages 72-121 filed with the letter dated 12.01.2005, leads to a change of the names of the sequences designated therewith, which new names were not disclosed in the application as filed. The introduction of these new references is therefore considered to represent the introduction of subject-matter extending beyond the content of the application as filed, contrary to the requirements of Article 34(2)(b) PCT. Said set of claims and amended pages 72-121 filed with the letter dated 12.01.2005 have therefore been ignored (Rule 70.2(c) PCT).
- 1.1 The applicant is to note that this objection could be overcome in a later national/regional phase by deleting the references to SEQ ID NO's from the tables and the claims, and by introducing the original Sequence ID's from the tables.

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. As indicated in the international search report, claims 1-5 and 7-36 have not been searched, whereas claim 6 has only been partially searched. In accordance with Rule 66.1(e) PCT, the present report has only been established for the subject-matter in respect of which an international search report has been drawn (Rule 70.2(d) PCT), i.e. for the subject-matter of independent claims 6 (partially) and 37 (completely).

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Document D1 (WO-A-02/059271) discloses (cf. SEQ ID NO:204) a probe derived from I-24 (SEQ ID NO:11). The subject-matter of independent claim 6 is hence not novel in the sense of Article 33(2) PCT.

2. Document D2 (Current Opinion in Immunology, 2000, 12:201-205) reviews different methods of analysing complex data sets. Typical data sets are, for example, data sets obtained by hybridising cDNA from diseased and "normal" patients to an array of probes immobilised to a solid surface (see the whole document, in particular the paragraph bridging pages 203 and 204). Moreover, D2 teaches that a JackKnife analysis is advantageous for the analysis of said complex data sets (see e.g. paragraph bridging columns 1 and 2, page 201, and the first full paragraph of the first column of page 203).
In view of D2, the person skilled in the art would thus have designed a method falling within the scope of independent claim 37 in an obvious manner.
The subject-matter of independent claim 37 is therefore not considered to be inventive in the sense of Article 33(3) PCT.

Table 1a

List of probes informative for disease diagnosis

	Clone ID	Sequence ID	No. of nucleotides	SEQ ID NO: in sequence listing
1	I-01	-	-	-
2	I-02	-	-	-
3	I-13	-	-	-
4	I-21	-	-	-
5	I-24	308	373	11
6	I-28	310	564	13
7	I-30	1180	622	398
8	I-34	313	554	15
9	I-37	-	-	-
10	I-42	-	-	-
11	I-52	-	-	-
12	I-54	1181	155	399
13	I-58	326	554	24
14	I-71	-	-	-
15	I-72	-	-	-
16	I-86	-	-	-
17	I-95	-	-	-
18	II-03	361	622	34
19	II-05	363	628	35
20	II-06	364	528	36
21	II-10	368	329	39
22	II-24	381	534	47
23	II-25	382	444	48
24	II-26	383	566	49
25	II-33	390	523	55
26	II-34	391	566	56
27	II-41	397	534	60
28	II-42	398	512	61
29	II-47	-	-	-

30	II-57	411	505	73
31	II-61	415	596	77
32	II-69	423	387	85
33	II-70	424	420	86
34	II-75	429	535	91
35	II-83	-	-	-
36	II-84	438	577	99
37	II-87	441	552	100
38	II-88	442	606	101
39	II-90	-	-	-
40	II-94	448	329	104
41	III-02	453	747	107
42	III-05	-	-	-
43	III-06	458	682	109
44	III-08	460	536	111
45	III-10	-	-	-
46	III-13	464	615	115
47	III-15	-	-	-
48	III-17	-	-	-
49	III-20	1183	479	401
50	III-23	473	694	119
51	III-26	476	476	122
52	III-35	485	551	130
53	III-39	487	224	131
54	III-40	488	349	132
55	III-43	490	382	500
56	III-44	491	382	134
57	III-53	500	390	142
58	III-56	503	109	144
59	III-57	504	374	145
60	III-60	-	-	-
61	III-60	-	-	-
62	III-61	507	521	148

63	III-63	509	575	150
64	III-68	-	-	-
65	III-74	518	502	155
66	III-80	523	585	158
67	III-82	-	-	-
68	III-85	526	516	161
69	III-89	530	660	165
70	III-92	-	-	-
71	III-96	-	-	-
72	IV-14	684	545	275
73	IV-15	1185	628	402
74	IV-23	-	-	-
76	IV-26	1186	494	403
75	IV-26	-	-	-
77	IV-29	-	-	-
78	IV-31	687	268	278
79	IV-32	688	569	279
80	IV-34	-	-	-
81	IV-35	-	-	-
82	IV-41	-	-	-
83	IV-45	-	-	-
84	IV-53	61	362	498
85	IV-62	-	-	-
86	IV-69	192	286	4
87	IV-80	701	579	291
88	IV-82	-	-	-
89	IV-93	-	-	-
90	IX-10	736	641	314
91	IX-12	-	-	-
92	IX-38	757	583	317
93	IX-39	758	424	318
94	IX-42	-	-	-
95	IX-48	764	626	319

96	IX-77	785	556	325
97	V-01	-	-	-
98	V-02	-	-	-
99	V-03	706	496	296
100	V-04	707	397	297
101	V-06	-	-	-
102	V-07	708	293	298
103	V-11	1188	599	404
104	V-12	711	498	301
105	V-15	-	-	-
106	V-17	-	-	-
107	V-21	-	-	-
108	V-25	-	-	-
109	V-32	-	-	-
110	V-35	-	-	-
111	V-39	-	-	-
112	V-42	-	-	-
113	V-43	-	-	-
114	V-47	-	-	-
115	V-49	-	-	-
116	V-52	-	-	-
117	V-54	-	-	-
118	V-55	77	412	499
119	V-58	-	-	-
120	V-59	-	-	-
121	V-65	-	-	-
122	V-68	-	-	-
123	V-71	-	-	-
124	V-75	-	-	-
125	V-79	-	-	-
126	V-80	726	260	311
127	V-90	-	-	-
128	V-91	-	-	-

129	V-92	-	-	-
130	V-94	-	-	-
131	VI-02	-	-	-
132	VI-04	865	122	339
133	VI-07	93	405	1
134	VI-09	-	-	-
135	VI-10	-	-	-
136	VI-12	869	667	341
137	VI-14	871	642	343
138	VI-17	-	-	-
139	VI-20	876	115	346
140	VI-21	-	-	-
141	VI-23	878	634	347
142	VI-34	-	-	-
143	VI-41	-	-	-
144	VI-42	-	-	-
145	VI-43	-	-	-
146	VI-44	-	-	-
147	VI-48	891	626	355
148	VI-49	-	-	-
149	VI-50	893	585	356
150	VI-52	-	-	-
151	VI-53	895	560	357
152	VI-55	897	509	359
153	VI-65	-	-	-
154	VI-70	108	550	2
155	VI-71	-	-	-
156	VI-72	-	-	-
157	VI-74	905	655	365
158	VI-76	907	582	367
159	VI-78	-	-	-
160	VI-79	-	-	-
161	VI-84	-	-	-

162	VI-87	911	595	370
163	VI-88	912	651	371
164	VI-90	-	-	-
165	VI-93	-	-	-
166	VI-95	915	230	374
167	VI-96	-	-	-
168	VII-02	-	-	-
169	VII-03	1196	412	411
170	VII-06	-	-	-
171	VII-10	-	-	-
172	VII-11	-	-	-
173	VII-15	1199	439	414
174	VII-19	562	580	171
175	VII-21	564	671	173
176	VII-25	-	-	-
177	VII-32	571	457	179
178	VII-36	575	209	182
179	VII-39	576	541	183
180	VII-42	579	502	186
181	VII-43	580	316	187
182	VII-46	583	631	190
183	VII-47	1200	526	415
184	VII-48	1201	613	416
185	VII-59	593	565	199
186	VII-60	-	-	-
187	VII-63	595	98	201
188	VII-66	598	362	204
189	VII-67	-	-	-
190	VII-72	600	595	206
191	VII-73	601	522	207
192	VII-75	-	-	-
193	VII-76	603	624	209
194	VII-77	1203	692	418

195	VII-80	605	338	210
196	VII-81	606	556	211
197	VII-83	-	-	-
198	VII-86	-	-	-
199	VII-88	-	-	-
200	VII-90	612	576	216
201	VII-91	613	341	217
202	VII-93	615	379	219
203	VIII-01	-	-	-
204	VIII-02	-	-	-
205	VIII-03	-	-	-
206	VIII-06	-	-	-
207	VIII-09	618	598	221
208	VIII-10	-	-	-
209	VIII-15	-	-	-
210	VIII-20	628	419	229
211	VIII-22	-	-	-
212	VIII-26	-	-	-
213	VIII-28	634	511	235
214	VIII-29	635	592	236
215	VIII-30	636	572	237
216	VIII-31	637	482	238
217	VIII-32	638	545	239
218	VIII-33	639	624	240
219	VIII-39	-	-	-
220	VIII-41	645	649	245
221	VIII-42	646	600	246
222	VIII-44	-	-	-
223	VIII-46	649	425	249
224	VIII-48	651	251	251
225	VIII-58	-	-	-
226	VIII-64	663	627	261
227	VIII-65	-	-	-

228	VIII-66	665	345	262
229	VIII-67	666	252	263
230	VIII-74	-	-	-
231	VIII-76	675	591	270
232	VIII-78	-	-	-
233	VIII-82	-	-	-
234	VIII-83	-	-	-
235	VIII-85	-	-	-
236	VIII-87	-	-	-
237	VIII-91	-	-	-
238	VIII-92	-	-	-
239	VIII-93	-	-	-
240	VIII-95	-	-	-
241	X-04	-	-	-
242	X-07	808	641	328
243	X-15	814	132	329
244	X-29	821	370	331
245	X-34	-	-	-
246	X-35	-	-	-
247	X-54	837	603	334
248	X-56	839	71	335
249	X-68	1207	642	421
250	X-72	849	622	336
251	X-94	860	501	337
252	XI-07	-	-	-
253	XI-13	1209	620	423
254	XI-50	-	-	-
255	XI-58	-	-	-
256	XI-81	1212	374	426
257	XII-07	1213	567	427
258	XII-17	-	-	-
259	XII-26	-	-	-
260	XII-27	-	-	-

261	XII-31	-	-	-
262	XII-32	-	-	-
263	XII-35	1214	620	428
264	XII-36	-	-	-
265	XII-52	-	-	-
266	XII-59	1216	484	430
267	XIII-19	1219	559	433
268	XIII-29	-	-	-
269	XIII-52	939	513	378
270	XIII-62	-	-	-
271	XIII-84	-	-	-
272	XIII-92	1221	741	435
273	XV-18	-	-	-
274	XV-22	1099	561	388
275	XV-24	-	-	-
276	XV-25	1224	485	436
277	XV-28	-	-	-
278	XV-34	-	-	-
279	XV-42	-	-	-
280	XV-68	-	-	-
281	XV-74	-	-	-
282	XV-93	-	-	-
283	XV-94	-	-	-
284	XV-96	-	-	-
285	XVI-36	1056	435	382
286	XVI-53	1230	741	439
287	XVI-59	-	-	-
288	XVI-66	1074	689	384
289	XVI-76	1083	198	386
290	XVI-77	1084	198	387
291	XVII-07	-	-	-
292	XVII-08	-	-	-
293	XVII-17	-	-	-

294	XVII-28	-	-	-
295	XVII-29	-	-	-
296	XVII-31	1139	503	392
297	XVII-36	-	-	-
298	XVII-39	-	-	-
299	XVII-40	1231	203	440
300	XVII-48	1148	587	393
301	XVII-55	-	-	-
302	XVII-58	-	-	-
303	XVII-67	-	-	-
304	XVII-72	-	-	-
305	XVII-76	1160	650	394
306	XVII-82	-	-	-
307	XVII-87	1165	502	395
308	XVII-95	1172	648	396

- 82 -

Table 1b
List of sequences of probes informative for disease diagnosis

Please see the note at the bottom

Clone ID	Sequence ID	SEQ ID No. in sequencing listing
I-09	298	Missing
I-10	299	6
I-13	1331	444
I-14	1178	397
I-15	300	7
I-16	301	Missing
I-17	302	8
I-19	304	9
I-20	305	Missing
I-22	306	10
I-23	307	Missing
I-24	308	11
I-25	309	12
I-28	310	13
I-30	1180	398
I-31	311	14
I-32	312	Missing
I-34	313	15
I-37	1440	482
I-38	314	16
I-39	315	17
I-40	316	18
I-42	1332	445
I-44	317	Missing
I-45	318	Missing
I-46	319	Missing
I-47	320	Missing
I-48	321	19

Clone ID	Sequence ID	
I-49	322	20
I-53	323	21
I-54	1181	399
I-56	324	22
I-57	325	23
I-58	326	24
I-60	327	25
I-64	328	26
I-67	330	27
I-69	331	28
I-71	332	Missing
I-72	333	Missing
I-73	334	Missing
I-77	335	29
I-79	336	Missing
I-80	337	30
I-81	338	31
I-82	339	32
I-86	1336	447
I-88	1182	400
I-95	1337	448
II-02	360	33
II-03	361	34
II-05	363	35
II-06	364	36
II-07	365	37
II-08	366	38
II-09	367	Missing

- 83 -

II-10	368	39
II-11	369	40
II-12	370	41
II-13	371	42
II-14	372	Missing
II-15	373	43
II-16	374	44
II-17	375	Missing
II-18	376	Missing
II-20	377	Missing
II-21	378	45
II-22	379	Missing
II-23	380	46
II-24	381	47
II-25	382	48
II-26	383	49
II-27	384	50
II-28	385	Missing
II-29	386	51
II-30	387	52
II-31	388	53
II-32	389	54
II-33	390	55
II-34	391	56
II-35	392	Missing
II-37	393	Missing
II-38	394	57
II-39	395	58
II-40	396	59
II-41	397	60
II-42	398	61
II-43	399	62

II-44	400	63
II-46	401	64
II-47	402	65
II-48	403	66
II-49	404	Missing
II-50	405	67
II-52	406	68
II-53	407	69
II-54	408	70
II-55	409	71
II-56	410	72
II-57	411	73
II-58	412	74
II-59	413	75
II-60	414	76
II-61	415	77
II-62	416	78
II-63	417	79
II-64	418	80
II-65	419	81
II-66	420	82
II-67	421	83
II-68	422	84
II-69	423	85
II-70	424	86
II-71	425	87
II-72	426	88
II-73	427	89
II-74	428	90
II-75	429	91
II-76	430	92
II-77	431	93

- 84 -

II-78	432	94
II-79	433	95
II-80	434	96
II-81	435	97
II-82	436	98
II- 83	437	Missing
II- 84	438	99
II- 85	439	Missing
II- 86	440	Missing
II- 87	441	100
II-88	442	101
II- 89	443	Missing
II- 90	444	Missing
II- 91	445	Missing
II- 92	446	102
II- 93	447	103
II- 94	448	104
II- 95	449	Missing
II- 96	450	105
III-01	452	106
III-02	453	107
III-03	454	108
III-04	455	Missing
III-05	457	Missing
III-06	458	109
III-07	459	110
III-08	460	111
III-09	461	112
III-11	462	113
III-12	463	114
III-13	464	115
III-14	465	Missing

III-15	466	Missing
III-16	467	Missing
III-17	468	Missing
III-18	469	116
III-19	470	Missing
III-20	1183	401
III-21	471	117
III-22	472	118
III-23	473	119
III-24	474	120
III-25	475	121
III-26	476	122
III-27	477	123
III-28	478	124
III-29	479	125
III-31	481	126
III-32	482	127
III-33	483	128
III-34	484	129
III-35	485	130
III-37	486	Missing
III-39	487	131
III-40	488	132
III-42	489	133
III-43	490	500
III-44	491	134
III-45	492	135
III-46	493	136
III-47	494	137
III-48	495	138
III-49	496	139
III-50	497	140

- 85 -

III-51	498	Missing
III-52	499	141
III- 53	500	142
III- 54	501	Missing
III- 55	502	143
III- 56	503	144
III- 57	504	145
III- 58	505	146
III- 59	506	147
III- 61	507	148
III- 62	508	149
III- 63	509	150
III- 64	510	151
III-65	511	Missing
III-66	512	152
III-67	513	153
III-69	514	Missing
III-70	515	154
III-71	516	Missing
III-73	517	Missing
III-74	518	155
III-75	519	156
III-77	520	Missing
III-78	521	157
III-79	522	Missing
III-80	523	158
III-81	524	159
III-82	1348	451
III-83	525	160
III-85	526	161
III-86	527	162
III-87	528	Missing

III-88	529	163 & 164
III-89	530	165
III- 91	531	Missing
III- 92	1351	452
III- 93	532	166
III- 94	533	167
III- 95	534	168
III- 96	535	Missing
IV-02	681	Missing
IV-04	682	273
IV-13	683	274
IV-14	684	275
IV-15	1185	402
IV-17	685	276
IV-23	1353	454
IV-26	1186	403
IV-28	686	277
IV-31	687	278
IV-32	688	279
IV-35	1355	455
IV-37	g6	497
IV-38	689	280
IV-40	690	281
IV-42	691	282
IV-43	1239	441
IV-44	692	283
IV-47	693	284
IV-53	61	498
IV-55	694	285
IV-56	695	Missing
IV-61	696	286
IV-64	697	287

- 86 -

IV-65	698	288
IV-69	192	4
IV-72	699	289
IV-73	700	290
IV-80	701	291
IV-82	196	Missing
IV-85	702	292
IV-93	703	293
IV-95	704	294
IV-96	705	295
IX-10	736	314
IX-12	738	Missing
IX-13	739	315
IX-24	747	316
IX-38	757	317
IX-39	758	318
IX-48	764	319
IX-50	766	320
IX-56	768	321
IX-62	773	322
IX-65	776	323
IX-72	782	324
IX-77	785	325
IX-91	796	326
IX-96	801	327
V-01	1361	458
V-03	706	296
V-04	707	297
V-07	708	298
V-08	709	299
V-09	710	300
V-11	1188	404

V1-16	873	344
V1-19	875	345
V-12	711	301
V-17	1364	459
V-18	712	Missing
V-20	713	302
V-24	714	303
V-25	1365	460
V-28	1189	405
V-35	1366	461
V-37	716	Missing
V-38	1190	406
V-39	1109	389
V-40	717	304
V-41	718	305
V-47	1368	463
V-48	719	306
V-49	1369	464
V-55	77	499
V-57	720	307
V-58	1370	465
V-61	721	308
V-64	722	309
V-65	723	Missing
V-68	1448	484
V-71	1495	496
V-74	724	310
V-75	1372	467
V-80	726	311
V-81	727	312
V-87	728	313
V-90	1374	468

- 87 -

VI-02	340	Missing
VI-03	341	Missing
VI-04	342	Missing
VI-06	343	Missing
VI-07	344	Missing
VI-08	345	Missing
VI-09	346	Missing
VI-11	347	Missing
VI-12	869	341
VI-13	870	342
VI-14	871	343
VI-16	873	344
VI-18	348	Missing
VI-19	349	Missing
VI-20	350	Missing
VI-21	351	Missing
VI-22	352	Missing
VI-23	878	347
VI-24	879	348
VI-25	353	Missing
VI-26	354	Missing
VI-27	355	Missing
VI-31	356	Missing
VI-32	885	351
VI-33	357	Missing
VI-35	358	Missing
VI-39	887	352
VI-43	1382	471
VI-44	1193	409
VI-45	889	353
VI-48	359	Missing
VI-49	892	501

VI-50	893	356
VI-53	895	357
VI-55	897	359
VI-58	899	361
VI-66	903	363
VI-67	904	364
VI-70	108	2
VI-71	1387	472
VI-74	905	365
VI-75	906	366
VI-76	907	367
VI-77	110	3
VI-79	1389	473
VI-80	908	368
VI-85	910	369
VI-87	911	370
VI-88	912	371
VI-90	1390	474
VI-93	1391	475
VI-95	915	374
VI-96	1392	476
VII-02	547	Missing
VII-03	548	Missing
VII-04	549	Missing
VII-05	550	Missing
VII-06	551	Missing
VII-07	552	Missing
VII-08	553	Missing
VII-09	554	Missing
VII-10	555	Missing
VII-11	556	Missing
VII-12	557	Missing

- 88 -

VII-14	558	Missing
VII-15	559	Missing
VII-17	560	169
VII-18	561	170
VII-19	562	171
VII-20	563	172
VII-21	564	173
VII-22	565	174
VII-23	566	175
VII-24	567	176
VII-25	1397	480
VII-26	250	5
VII-27	568	177
VII-28	569	Missing
VII-29	570	178
VII-32	571	179
VII-33	572	180
VII-34	573	Missing
VII-35	574	181
VII-36	575	182
VII-39	576	183
VII-40	577	184
VII-41	578	185
VII-42	579	186
VII-43	580	187
VII-44	581	188
VII-45	582	189
VII-46	583	190
VII-47	1200	415
VII-48	584	Missing
VII-49	585	191
VII-50	586	192

VII-52	587	193
VII-53	588	194
VII-54	589	195
VII-55	590	196
VII-57	591	197
VII-58	592	198
VII-59	593	199
VII-62	594	200
VII-63	595	201
VII-64	596	202
VII-65	597	203
VII-66	598	204
VII-67	1399	481
VII-71	599	205
VII-72	600	206
VII-73	601	207
VII-74	602	208
VII-76	603	209
VII-77	604	Missing
VII-80	605	210
VII-81	606	211
VII-82	607	212
VII-83	608	Missing
VII-84	609	213
VII-86	1453	487
VII-87	610	214
VII-89	611	215
VII-90	612	216
VII-91	613	217
VII-92	614	218
VII-93	615	219
VII-94	616	Missing

- 89 -

VII-96	617	220
VIII-09	618	221
VIII-10	619	222
VIII-11	620	Missing
VIII-12	621	223
VIII-13	622	224
VIII-15	623	Missing
VIII-16	624	225
VIII-17	625	226
VIII-18	626	227
VIII-19	627	228
VIII-20	628	229
VIII-21	629	230
VIII-22	1455	Missing
VIII-23	630	231
VIII-24	631	232
VIII-25	632	233
VIII-26	1456	489
VIII-27	633	234
VIII-28	634	235
VIII-29	635	236
VIII-30	636	237
VIII-31	637	238
VIII-32	638	239
VIII-33	639	240
VIII-34	640	Missing
VIII-36	641	241
VIII-37	642	242
VIII-38	643	243
VIII-40	644	244
VIII-41	645	245
VIII-42	646	246

VIII-43	647	247
VIII-45	648	248
VIII-46	649	249
VIII-47	650	250
VIII-48	651	251
VIII-50	652	252
VIII-51	653	253
VIII-53	654	254
VIII-54	655	255
VIII-55	656	256
VIII-56	657	257
VIII-57	658	258
VIII-58	659	Missing
VIII-59	660	259
VIII-60	661	260
VIII-61	662	Missing
VIII-64	663	261
VIII-65	664	Missing
VIII-66	665	262
VIII-67	666	263
VIII-68	667	Missing
VIII-69	668	Missing
VIII-70	669	264
VIII-71	670	265
VIII-72	671	266
VIII-73	672	267
VIII-74	673	268
VIII-75	674	269
VIII-76	675	270
VIII-77	676	271
VIII-78	677	Missing
VIII-79	678	Missing

- 90 -

VIII-80	679	272
X-07	808	328
X-15	814	329
X-20	817	330
X-29	821	331
X-34	825	332
X-46	833	333
X-54	837	334
X-56	839	335
X-68	1207	421
X-72	849	336
X-73	1208	422
X-94	860	337
XI-13	1209	423
XI-37	1460	490
XI-43	1210	424
XI-67	1211	425
XI-81	1212	426
XII-07	1213	427
XII-35	1214	428
XII-36	1215	429
XII-59	1216	430
XII-65	1028	381
XII-92	1217	431
XIII-03	917	375
XIII-04	1218	432
XIII-19	1219	433
XIII-24	926	376
XIII-51	938	377

XIII-52	939	378
XIII-67	947	379
XIII-69	949	380
XIII-88	1220	434
XIII-92	1221	435
XV-22	1099	388
XV-24	1101	Missing
XV-25	1224	436
XV-42	1108	Missing
XV-62	1226	437
XV-64	1118	390
XV-84	1125	391
XVI-19	1228	438
XVI-36	1056	382
XVI-53	1230	439
XVI-60	1071	383
XVI-66	1074	384
XVI-74	1081	385
XVI-76	1083	386
XVI-77	1084	387
XVII-31	1139	392
XVII-40	1231	440
XVII-48	1148	393
XVII-76	1160	394
XVII-87	1165	395
XVII-95	1172	396

- 91 -

Note**Sequences not available for sequence IDs in Table 1, and corresponding sequence IDs in Tables 2 and 4.**

298, 301, 305, 307, 312, 317, 318, 319, 320, 332, 333, 334, 336, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 367, 372, 375, 376, 377, 379, 385, 392, 393, 404, 437, 439, 440, 443, 444, 445, 449, 455, 457, 465, 466, 467, 468, 470, 486, 498, 501, 511, 514, 516, 517, 520, 522, 528, 531, 535, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 573, 584, 604, 608, 616, 620, 623, 640, 659, 662, 664, 667, 668, 673, 677, 678, 679, 681, 695, 702, 712, 716, 825, 886, 894, 902, 909, 916, 1101, 1108, 1109, 1177, 1187, 1193, 1204, 1220, 1239, 1255, 1256, 1342, 1347, 1354, 1357, 1362, 1363, 1364, 1373, 1375, 1379, 1403, 1404, 1405, 1406, 1413

- 92 -

Table 2a

List of informative probes for diagnosis of breast cancer

Clone ID	Sequence ID	SEQ ID NO. in sequence listing
I-24	308	11
I-28	310	13
I-30	1180	398
I-52	-	-
I-54	1181	399
II-41	397	60
II-70	424	86
II-87	441	100
III-06	458	109
III-20	1183	401
III-40	488	132
III-57	504	145
III-60	-	-
III-61	507	148
III-89	530	165
IV-14	684	275
IV-15	1185	402
IV-26	1186	403
IV-32	688	279
IV-41	-	-
IV-53	61	498
IV-62	-	-
IV-69	192	4
IV-80	701	291
IV-82	196	missing
IX-10	736	314
IX-12	-	-
IX-38	757	317

Clone ID	Sequence ID	SEQ ID NO. in sequence listing
IX-48	764	319
IX-77	785	325
V-11	1188	404
V-32	-	-
V-39	-	-
V-55	77	499
V-80	726	311
V-94	-	-
VI-07	93	1
VI-34	-	-
VI-41	-	-
VI-48	891	355
VI-49	-	-
VI-52	-	-
VI-55	897	359
VI-65	-	-
VI-70	108	2
VI-72	-	-
VI-78	-	-
VI-84	-	-
VII-03	1196	411
VII-15	1199	414
VII-32	571	179
VII-39	576	183
VII-47	1200	415
VII-48	1201	416
VII-60	-	-
VII-73	601	207

- 93 -

VII-77	1203	418
VII-90	612	216
VIII-20	628	229
VIII-29	635	236
VIII-30	636	237
VIII-31	637	238
VIII-39	-	-
VIII-44	-	-
VIII-46	649	249
VIII-48	651	251
VIII-66	665	262
VIII-74	-	-
VIII-76	675	270
X-04	-	-
X-07	808	328
X-15	814	329
X-29	821	331
X-34	-	-
X-35	-	-
X-54	837	334
X-56	839	335
X-68	1207	421
X-72	849	336
X-94	860	337
XI-07	-	-
XI-13	1209	423
XI-50	-	-
XI-58	-	-
XI-81	1212	426
XII-07	1213	427
XII-17	-	-
XII-26	-	-

XII-27	-	-
XII-31	-	-
XII-32	-	-
XII-35	1214	428
XII-36	-	-
XII-52	-	-
XII-59	1216	430
XIII-19	1219	433
XIII-29	-	-
XIII-52	939	378
XIII-62	-	-
XIII-84	-	-
XIII-92	1221	435
XV-18	-	-
XV-22	1099	388
XV-24	-	-
XV-25	1224	436
XV-28	-	-
XV-34	-	-
XV-42	-	-
XV-68	-	-
XV-74	-	-
XV-93	-	-
XV-94	-	-
XV-96	-	-
XVI-36	1056	382
XVI-53	1230	439
XVI-59	-	-
XVI-66	1074	384
XVI-76	1083	386
XVI-77	1084	387
XVII-07	-	-

- 94 -

XVII-08	-	-
XVII-17	-	-
XVII-28	-	-
XVII-29	-	-
XVII-31	1139	392
XVII-36	-	-
XVII-39	-	-
XVII-40	1231	440
XVII-48	1148	393
XVII-55	-	-
XVII-58	-	-
XVII-67	-	-
XVII-72	-	-
XVII-76	1160	394
XVII-82	-	-
XVII-87	1165	395
XVII-95	1172	396

- 95 -

Table 2b

List of sequences of probes informative for breast cancer

Please see the note at the bottom of Table 1. Some sequences are missing.

Clone ID	Sequence ID	SEQ ID NO. in sequence listing
I-13	1331	444
I-14	1178	397
I-24	308	11
I-25	309	12
I-28	310	13
I-30	1180	398
I-37	1440	482
I-42	1332	445
I-48	321	19
I-54	1181	399
I-60	327	25
I-72	1335	446
I-81	338	31
I-82	339	32
I-86	1336	447
I-88	1182	400
I-95	1337	448
II-02	360	33
II-03	361	34
II-06	364	36
II-07	365	37
II-10	368	39
II-21	378	45
II-23	380	46
II-24	381	47
II-25	382	48
II-27	384	50

Clone ID	Sequence ID	SEQ ID NO. in sequence listing
II-33	390	55
II-34	391	56
II-41	397	60
II-42	398	61
II-46	401	64
II-47	1338	449
II-48	403	66
II-52	406	68
II-57	411	73
II-58	412	74
II-59	413	75
II-60	414	76
II-61	415	77
II-62	416	78
II-64	418	80
II-67	421	83
II-69	423	85
II-70	424	86
II-74	428	90
II-80	434	96
II-82	436	98
II-84	438	99
II-87	441	100
II-88	442	101
II-96	450	105
III-01	452	106
III-02	453	107

- 96 -

III-06	458	109
III-08	460	111
III-12	463	114
III-13	464	115
III-17	1344	450
III-18	469	116
III-20	1183	401
III-21	471	117
III-23	473	119
III-24	474	120
III-25	475	121
III-26	476	122
III-27	477	123
III-28	478	124
III-29	479	125
III-32	482	127
III-33	483	128
III-35	485	130
III-39	487	131
III-40	488	132
III-42	489	133
III-45	492	135
III-46	493	136
III-47	494	137
III-48	495	138
III-56	503	144
III-57	504	145
III-58	505	146
III-59	506	147
III-61	507	148
III-62	508	149
III-63	509	150

III-64	510	151
III-66	512	152
III-67	513	153
III-70	515	154
III-74	518	155
III-75	519	156
III-78	521	157
III-80	523	158
III-81	524	159
III-82	1348	451
III-85	526	161
III-86	527	162
III-88	529	163+164
III-89	530	165
III-92	1351	452
III-93	532	166
III-95	534	168
III-96	1352	453
IV-04	682	273
IV-13	683	274
IV-14	684	275
IV-15	1185	402
IV-17	685	276
IV-23	1353	454
IV-26	1186	403
IV-31	687	278
IV-32	688	279
IV-35	1355	455
IV-37	G6	497
IV-38	689	280
IV-42	691	282
IV-43	1239	441

- 97 -

IV-47	693	284
IV-53	61	498
IV-61	696	286
IV-64	697	287
IV-69	192	4
IV-72	699	289
IV-80	701	291
IV-82	196	Missing
IV-85	702	292
IV-93	1360	457
IV-96	705	295
IX-10	736	314
IX-12	738	Missing
IX-13	739	315
IX-24	747	316
IX-38	757	317
IX-39	758	318
IX-48	764	319
IX-50	766	320
IX-56	768	321
IX-62	773	322
IX-65	776	323
IX-72	782	324
IX-77	785	325
IX-91	796	326
IX-96	801	327
V-01	1361	458
V-03	706	296
V-04	707	297
V-07	708	298
V-08	709	299
V-11	1188	404

V-12	711	301
V-17	1364	459
V-24	714	303
V-25	1365	460
V-28	1189	405
V-35	1366	461
V-38	1190	406
V-39	1109	389
V-41	718	305
V-47	1368	463
V-49	1369	464
V-55	77	499
V-57	720	307
V-58	1370	465
V-61	721	308
V-64	722	309
V-65	1371	466
V-68	1448	484
V-71	1495	496
V-74	724	310
V-75	1372	467
V-80	726	311
V-90	1374	468
VI-03	864	338
VI-04	865	339
VI-07	93	1
VI-08	867	340
VI-09	1378	469
VI-12	869	341
VI-13	870	342
VI-14	871	343
VI-16	873	344

- 98 -

VI-19	875	345
VI-20	876	346
VI-21	1380	470
VI-23	878	347
VI-24	879	348
VI-25	1192	408
VI-26	881	349
VI-32	885	351
VI-39	887	352
VI-43	1382	471
VI-44	1193	409
VI-45	889	353
VI-48	891	355
VI-49	892	501
VI-50	893	356
VI-53	895	357
VI-55	897	359
VI-58	899	361
VI-66	903	363
VI-67	904	364
VI-70	108	2
VI-71	1387	472
VI-74	905	365
VI-75	906	366
VI-76	907	367
VI-77	110	3
VI-79	1389	473
VI-80	908	368
VI-85	910	369
VI-87	911	370
VI-88	912	371
VI-90	1390	474

VI-93	1391	475
VI-95	915	374
VI-96	1392	476
VII-02	1195	410
VII-03	1196	411
VII-06	1394	477
VII-08	1197	412
VII-09	1198	413
VII-10	1395	478
VII-11	1396	479
VII-15	1199	414
VII-17	560	169
VII-19	562	171
VII-21	564	173
VII-22	565	174
VII-23	566	175
VII-24	567	176
VII-25	1397	480
VII-26	250	5
VII-27	568	177
VII-29	570	178
VII-32	571	179
VII-33	572	180
VII-36	575	182
VII-39	576	183
VII-41	578	185
VII-42	579	186
VII-43	580	187
VII-46	583	190
VII-47	1200	415
VII-48	1201	416
VII-49	585	191

- 99 -

VII-54	589	195
VII-57	591	197
VII-58	592	198
VII-59	593	199
VII-62	594	200
VII-63	1202	417
VII-64	596	202
VII-66	598	204
VII-67	1399	481
VII-72	600	206
VII-73	601	207
VII-77	1203	418
VII-80	605	210
VII-82	607	212
VII-86	1453	487
VII-87	610	214
VII-90	612	216
VII-91	613	217
VII-92	614	218
VII-93	615	219
VII-96	617	220
VIII-09	618	221
VIII-10	619	222
VIII-13	622	224
VIII-16	624	225
VIII-20	628	229
VIII-21	629	230
VIII-22	1455	Missing
VIII-23	630	231
VIII-24	631	232
VIII-25	632	233
VIII-26	1456	489

VIII-27	633	234
VIII-28	634	235
VIII-29	635	236
VIII-30	636	237
VIII-31	637	238
VIII-32	638	239
VIII-33	639	240
VIII-34	1204	419
VIII-38	643	243
VIII-40	644	244
VIII-41	645	245
VIII-46	649	249
VIII-48	651	251
VIII-55	656	256
VIII-57	658	258
VIII-59	660	259
VIII-60	661	260
VIII-61	1205	420
VIII-64	663	261
VIII-66	665	262
VIII-73	672	267
VIII-74	673	268
VIII-76	675	270
VIII-80	679	272
X-07	808	328
X-15	814	329
X-20	817	330
X-29	821	331
X-34	825	332
X-46	833	333
X-54	837	334
X-56	839	335

- 100 -

X-68	1207	421
X-72	849	336
X-73	1208	422
X-94	860	337
XI-13	1209	423
XI-37	1460	490
XI-43	1210	424
XI-67	1211	425
XI-81	1212	426
XII-07	1213	427
XII-35	1214	428
XII-36	1215	429
XII-59	1216	430
XII-65	1028	381
XII-92	1217	431
XIII-03	917	375
XIII-04	1218	432
XIII-19	1219	433
XIII-24	926	376
XIII-51	938	377
XIII-52	939	378
XIII-67	947	379
XIII-69	949	380
XIII-88	1220	434
XIII-92	1221	435
XV-22	1099	388
XV-24	1101	Missing
XV-25	1224	436
XV-42	1108	Missing
XV-62	1226	437
XV-64	1118	390
XV-84	1125	391

XVI-19	1228	438
XVI-36	1056	382
XVI-53	1230	439
XVI-60	1071	383
XVI-66	1074	384
XVI-74	1081	385
XVI-76	1083	386
XVI-77	1084	387
XVII-31	1139	392
XVII-40	1231	440
XVII-48	1148	393
XVII-76	1160	394
XVII-87	1165	395
XVII-95	1172	396

- 101 -

Table 3

List of informative probes (Clone ID) selected for breast cancer diagnosis based on their occurrence critrion during selection

Occurrence*	Clone ID
100%	XI-8, XVI-66, VIII-66, XVI-59, VII-03, XIII-19, XII-35, X-35, XI-50, XII-26, IV-53, XIII-29, XIII-62, I-30, III-06, XV-22, XV-94, VII-15, VII-39, IX-39, XVII-39, III-40, VII-32
90%	I-52, VI-65, VI-34, IV-62, XV-34, XVII-58, V-11, VI-78, XII-36, XIII-92, VIII-29, XVI-53, XVI-77, XI-13, XIII-84, IV-14, XII-31, V-80, VII-48, XVII-29, XVII-72
80%	III-60, VIII-74, IX-12, X-04, XIII-52, VIII-30, IX-38
70%	VI-49, X-29, VIII-48
60%	IV-82, IX-10, VI-52, X-68, VII-77
50%	IV-15
40%	XV-28, II-70, V-55
30%	XVII-17, XVII-67
20%	XI-58, XVI-36, VIII-39, VIII-44, III-61, IV-69, XV-68, X-72
10%	IX-42, IX-77, X-94, XV-96, XVII-55
5%	XII-59, XVI-76, I-54, XV-18, V-94, X-54, VI-07, VII-47, XVII-31, XVII-87, XVII-48
In at least one model	II-41, VI-41, III-57, III-89, VII-73, XV-25, IV-26, X-34, IV-41, VII-90, XV-42, XVII-82, XII-27, VIII-20, I-28, VII-60, VIII-76, III-20, VI-84, XI-07, XVII-28, XII-17, XVII-36, XII-52, XVII-76, VIII-46, VI-70, XV-74, XV-93, VIII-31, II-87, V-39, VI-55, X-07, X-15, XII-07, XVII-07, XVII-08, XVII-95, I-24, IV-32, V-32, VI-48, VI-72, IV-80, IX-48, X-56, XV-24, XII-32, XVII-40

*100% = Genes appearing in all the 75 cross validated models;

90% = Additional genes appearing in at least 68 out of 75 cross validated models;

5% = Additional genes appearing in at least 4 out of 75 cross validated models and so on.

- 102 -

Table 4a

List of informative probes for diagnosis of Alzheimer disease

Clone ID	Sequence ID	
I-01	-	-
I-02	-	-
I-13	-	-
I-21	-	-
I-34	313	15
I-37	-	-
I-42	-	-
I-58	326	24
I-71	-	-
I-72	-	-
I-86	-	-
I-95	-	-
II-03	361	34
II-05	363	35
II-06	364	36
II-10	368	39
II-24	381	47
II-25	382	48
II-26	383	49
II-33	390	55
II-34	391	56
II-42	398	61
II-47	-	-
II-57	411	73
II-61	415	77
II-69	423	85
II-75	429	91
II-83	-	-

Clone ID	Sequence ID	
II-84	438	99
II-88	442	101
II-90	-	-
II-94	448	104
III-02	453	107
III-05	-	-
III-06	458	109
III-08	460	111
III-10	-	-
III-13	464	115
III-15	-	-
III-17	-	-
III-23	473	119
III-26	476	122
III-35	485	130
III-39	487	131
III-43	490	500
III-44	491	134
III-53	500	142
III-56	503	144
III-60	-	-
III-63	509	150
III-68	-	-
III-74	518	155
III-80	523	158
III-82	-	-
III-85	526	161
III-92	-	-

- 103 -

III-96	-	-
IV-23	-	-
IV-26	-	-
IV-29	-	-
IV-31	687	278
IV-34	-	-
IV-35	-	-
IV-45	-	-
IV-80	701	291
IV-82	-	-
IV-93	-	-
V-01	-	-
V-02	-	-
V-03	706	296
V-04	707	297
V-06	-	-
V-07	708	298
V-12	711	301
V-15	-	-
V-17	-	-
V-21	-	-
V-25	-	-
V-35	-	-
V-42	-	-
V-43	-	-
V-47	-	-
V-49	-	-
V-52	-	-
V-54	-	-
V-58	-	-
V-59	-	-
V-65	-	-

V-68	-	-
V-71	-	-
V-75	-	-
V-79	-	-
V-80	726	311
V-90	-	-
V-91	-	-
V-92	-	-
VI-02	-	-
VI-04	865	339
VI-09	-	-
VI-10	-	-
VI-12	869	341
VI-14	871	343
VI-17	-	-
VI-20	876	346
VI-21	-	-
VI-23	878	347
VI-41	-	-
VI-42	-	-
VI-43	-	-
VI-44	-	-
VI-48	891	355
VI-49	-	-
VI-50	893	356
VI-53	895	357
VI-71	-	-
VI-74	905	365
VI-76	907	367
VI-78	-	-
VI-79	-	-
VI-87	911	370

- 104 -

VI-88	912	371
VI-90	-	-
VI-93	-	-
VI-95	915	374
VI-96	-	-
VII-02	-	-
VII-03	-	-
VII-06	-	-
VII-10	-	-
VII-11	-	-
VII-19	562	171
VII-21	564	173
VII-25	-	-
VII-36	575	182
VII-42	579	186
VII-43	580	187
VII-46	583	190
VII-59	593	199
VII-63	595	201
VII-66	598	204
VII-67	-	-
VII-72	600	206
VII-73	601	207
VII-75	-	-
VI-02	-	-
VI-04	866	MISSING
VI-09	-	-
VI-10	-	-
VI-12	873	344
VI-14	875	345
V-17	-	-

VII-91	613	217
VII-93	615	219
VIII-01	-	-
VIII-02	-	-
VIII-03	-	-
VIII-06	-	-
VIII-09	618	221
VIII-10	-	-
VIII-15	-	-
VIII-22	-	-
VIII-26	-	-
VIII-28	634	235
VIII-30	636	237
VIII-32	638	239
VIII-33	639	240
VIII-41	645	245
VIII-42	646	246
VIII-48	651	251
VIII-58	-	-
VIII-64	663	261
VIII-65	-	-
VIII-67	666	263
VIII-78	-	-
VIII-82	-	-
VIII-83	-	-
VIII-85	-	-
VIII-87	-	-
VIII-91	-	-
VIII-92	-	-
VIII-93	-	-
VIII-95	-	-

- 105 -

Table 4b

List of sequences of probes informative for Alzheimer disease

Please see the note to Table 1

Clone ID	Sequence ID	
I-09	298	Missing
I-10	299	6
I-15	300	7
I-16	301	Missing
I-17	302	8
I-19	304	9
I-20	305	Missing
I-22	306	10
I-23	307	Missing
I-24	308	11
I-25	309	12
I-28	310	13
I-31	311	14
I-32	312	Missing
I-34	313	15
I-38	314	16
I-39	315	17
I-40	316	18
I-44	317	Missing
I-45	318	Missing
I-46	319	Missing
I-47	320	Missing
I-48	321	19
I-49	322	20
I-53	323	21
I-56	324	22
I-57	325	23
I-58	326	24

Clone ID	Sequence ID	
I-60	327	25
I-64	328	26
I-67	330	27
I-69	331	28
I-71	332	Missing
I-72	333	Missing
I-73	334	Missing
I-77	335	29
I-79	336	Missing
I-80	337	30
I-81	338	31
I-82	339	32
VI-02	340	Missing
VI-03	341	Missing
VI-04	342	Missing
VI-06	343	Missing
VI-07	344	Missing
VI-08	345	Missing
VI-09	346	Missing
VI-11	347	Missing
VI-18	348	Missing
VI-19	349	Missing
VI-20	350	Missing
VI-21	351	Missing
VI-22	352	Missing
VI-25	353	Missing
VI-26	354	Missing
VI-27	355	Missing

- 106 -

VI-31	356	Missing
VI-33	357	Missing
VI-35	358	Missing
VI-48	359	Missing
II-02	360	33
II-03	361	34
II-05	363	35
II-06	364	36
II-07	365	37
II-08	366	38
II-09	367	Missing
II-10	368	39
II-11	369	40
II-12	370	41
II-13	371	42
II-14	372	Missing
II-15	373	43
II-16	374	44
II-17	375	Missing
II-18	376	Missing
II-20	377	Missing
II-21	378	45
II-22	379	Missing
II-23	380	46
II-24	381	47
II-25	382	48
II-26	383	49
II-27	384	50
II-28	385	Missing
II-29	386	51
II-30	387	52
II-31	388	53

II-32	389	54
II-33	390	55
II-34	391	56
II-35	392	Missing
II-37	393	Missing
II-38	394	57
II-39	395	58
II-40	396	59
II-41	397	60
II-42	398	61
II-43	399	62
II-44	400	63
II-46	401	64
II-47	402	65
II-48	403	66
II-49	404	Missing
II-50	405	67
II-52	406	68
II-53	407	69
II-54	408	70
II-55	409	71
II-56	410	72
II-57	411	73
II-58	412	74
II-59	413	75
II-60	414	76
II-61	415	77
II-62	416	78
II-63	417	79
II-64	418	80
II-65	419	81
II-66	420	82

- 107 -

II-67	421	83
II-68	422	84
II-69	423	85
II-70	424	86
II-71	425	87
II-72	426	88
II-73	427	89
II-74	428	90
II-75	429	91
II-76	430	92
II-77	431	93
II-78	432	94
II-79	433	95
II-80	434	96
II-81	435	97
II-82	436	98
II-83	437	Missing
II-84	438	99
II-85	439	Missing
II-86	440	Missing
II-87	441	100
II-88	442	101
II-89	443	Missing
II-90	444	Missing
II-91	445	Missing
II-92	446	102
II-93	447	103
II-94	448	104
II-95	449	Missing
II-96	450	105
III-01	452	106
III-02	453	107

III-03	454	108
III-04	455	Missing
III-05	457	Missing
III-06	458	109
III-07	459	110
III-08	460	111
III-09	461	112
III-11	462	113
III-12	463	114
III-13	464	115
III-14	465	Missing
III-15	466	Missing
III-16	467	Missing
III-17	468	Missing
III-18	469	116
III-19	470	Missing
III-21	471	117
III-22	472	118
III-23	473	119
III-24	474	120
III-25	475	121
III-26	476	122
III-27	477	123
III-28	478	124
III-29	479	125
III-31	481	126
III-32	482	127
III-33	483	128
III-34	484	129
III-35	485	130
III-37	486	Missing
III-39	487	131

- 108 -

III-40	488	132
III-42	489	133
III-43	490	500
III-44	491	134
III-45	492	135
III-46	493	136
III-47	494	137
III-48	495	138
III-49	496	139
III-50	497	140
III-51	498	Missing
III-52	499	141
III-53	500	142
III-54	501	Missing
III-55	502	143
III-56	503	144
III-57	504	145
III-58	505	146
III-59	506	147
III-61	507	148
III-62	508	149
III-63	509	150
III-64	510	151
III-65	511	Missing
III-66	512	152
III-67	513	153
III-69	514	Missing
III-70	515	154
III-71	516	Missing
III-73	517	Missing
III-74	518	155
III-75	519	156

III-77	520	Missing
III-78	521	157
III-79	522	Missing
III-80	523	158
III-81	524	159
III-83	525	160
III-85	526	161
III-86	527	162
III-87	528	Missing
III-88	529	163/164
III-89	530	165
III-91	531	Missing
III-93	532	166
III-94	533	167
III-95	534	168
III-96	535	Missing
VII-02	547	Missing
VII-03	548	Missing
VII-04	549	Missing
VII-05	550	Missing
VII-06	551	Missing
VII-07	552	Missing
VII-08	553	Missing
VII-09	554	Missing
VII-10	555	Missing
VII-11	556	Missing
VII-12	557	Missing
VII-14	558	Missing
VII-15	559	Missing
VII-17	560	169
VII-18	561	170
VII-19	562	171

- 109 -

VII-20	563	172
VII-21	564	173
VII-22	565	174
VII-23	566	175
VII-24	567	176
VII-27	568	177
VII-28	569	Missing
VII-29	570	178
VII-32	571	179
VII-33	572	180
VII-34	573	Missing
VII-35	574	181
VII-36	575	182
VII-39	576	183
VII-40	577	184
VII-41	578	185
VII-42	579	186
VII-43	580	187
VII-44	581	188
VII-45	582	189
VII-46	583	190
VII-48	584	Missing
VII-49	585	191
VII-50	586	192
VII-52	587	193
VII-53	588	194
VII-54	589	195
VII-55	590	196
VII-57	591	197
VII-58	592	198
VII-59	593	199
VII-62	594	200

VII-63	595	201
VII-64	596	202
VII-65	597	203
VII-66	598	204
VII-71	599	205
VII-72	600	206
VII-73	601	207
VII-74	602	208
VII-76	603	209
VII-77	604	Missing
VII-80	605	210
VII-81	606	211
VII-82	607	212
VII-83	608	Missing
VII-84	609	213
VII-87	610	214
VII-89	611	215
VII-90	612	216
VII-91	613	217
VII-92	614	218
VII-93	615	219
VII-94	616	Missing
VII-96	617	220
VIII-09	618	221
VIII-10	619	222
VIII-11	620	Missing
VIII-12	621	223
VIII-13	622	224
VIII-15	623	Missing
VIII-16	624	225
VIII-17	625	226
VIII-18	626	227

- 110 -

VIII-19	627	228
VIII-20	628	229
VIII-21	629	230
VIII-23	630	231
VIII-24	631	232
VIII-25	632	233
VIII-28	634	235
VIII-29	635	236
VIII-30	636	237
VIII-31	637	238
VIII-32	638	239
VIII-33	639	240
VIII-34	640	Missing
VIII-36	641	241
VIII-37	642	242
VIII-38	643	243
VIII-40	644	244
VIII-41	645	245
VIII-42	646	246
VIII-43	647	247
VIII-45	648	248
VIII-46	649	249
VIII-47	650	250
VIII-48	651	251
VIII-50	652	252
VIII-51	653	253
VIII-53	654	254
VIII-54	655	255
VIII-55	656	256
VIII-56	657	257
VIII-57	658	258
VIII-58	659	Missing

VIII-59	660	259
VIII-60	661	260
VIII-61	662	Missing
VIII-64	663	261
VIII-65	664	Missing
VIII-66	665	262
VIII-67	666	263
VIII-68	667	Missing
VIII-69	668	Missing
VIII-70	669	264
VIII-71	670	265
VIII-72	671	266
VIII-73	672	267
VIII-74	673	268
VIII-75	674	269
VIII-76	675	270
VIII-77	676	271
VIII-78	677	Missing
VIII-79	678	Missing
VIII-80	679	272
IV-02	681	Missing
IV-04	682	273
IV-13	683	274
IV-14	684	275
IV-17	685	276
IV-28	686	277
IV-31	687	278
IV-32	688	279
IV-38	689	280
IV-40	690	281
IV-42	691	282
IV-44	692	283

- 111 -

IV-47	693	284
IV-55	694	285
IV-56	695	Missing
IV-61	696	286
IV-64	697	287
IV-65	698	288
IV-72	699	289
IV-73	700	290
IV-80	701	291
IV-85	702	292
IV-93	703	293
IV-95	704	294
IV-96	705	295
V-03	706	296
V-04	707	297
V-07	708	298
V-08	709	299
V-09	710	300
V-12	711	301
V-18	712	Missing
V-20	713	302
V-24	714	303
V-37	716	Missing
V-40	717	304
V-41	718	305
V-48	719	306
V-57	720	307
V-61	721	308
V-64	722	309
V-65	723	Missing
V-74	724	310
V-80	726	311

VI-81	727	312
VI-87	728	313
VI-13	870	342
VI-14	871	343
VI-16	873	344
VI-23	878	347
VI-24	879	348
VI-28	883	350
VI-32	885	351
VI-38	886	Missing
VI-39	887	352
VI-45	889	353
VI-46	890	354
VI-49	892	501
VI-50	893	356
VI-52	894	Missing
VI-53	895	357
VI-54	896	358
VI-55	897	359
VI-57	898	360
VI-58	899	361
VI-63	900	362
VI-65	902	Missing
VI-66	903	363
VI-67	904	364
VI-74	905	365
VI-75	906	366
VI-76	907	367
VI-80	908	368
VI-81	909	Missing
VI-85	910	369
VI-87	911	370

- 112 -

VI-88	912	371
VI-91	913	372
VI-94	914	373
VI-95	915	374
VI-96	916	Missing
I-13	1177	Missing
I-14	1178	397
I-30	1180	398
I-54	1181	399
I-88	1182	400
III-20	1183	401
IV-15	1185	402
IV-26	1186	403
IV-62	1187	Missing
V-11	1188	404
V-28	1189	405
V-38	1190	406
V-45	1191	407
V-44	1193	409
VII-47	1200	415
I-42	1332	445
I-52	1333	Missing
I-86	1336	447
I-95	1337	448
III-10	1342	Missing
III-60	1347	Missing
III-82	1348	451
III-92	1351	452
IV-23	1353	454
IV-34	1354	Missing
IV-35	1355	455
IV-41	1356	Missing

IV-45	1357	Missing
IV-82	1359	456
V-01	1361	458
V-02	1362	Missing
V-06	1363	Missing
V-17	1364	459
V-25	1365	460
V-35	1366	461
V-42	1367	462
V-47	1368	463
V-49	1369	464
V-58	1370	465
V-75	1372	467
V-79	1373	Missing
V-90	1374	468
V-91	1375	Missing
V-94	1376	Missing
VI-10	1379	Missing
VI-41	1381	Missing
VI-43	1382	471
VI-71	1387	472
VI-72	1388	Missing
VI-79	1389	473
VI-90	1390	474
VI-93	1391	475
VII-25	1397	480
VII-60	1398	Missing
VII-67	1399	481
VIII-22	1403	Missing
VIII-26	1404	Missing
VIII-39	1405	Missing
VIII-44	1405	Missing

- 113 -

I-37	1440	482
V-32	1445	Missing
V-52	1447	483
V-68	1448	484
V-92	1449	485
VI-42	1450	486
VI-78	1452	Missing
VII-86	1453	487
VII-88	1454	488
IV-29	1490	491
V-15	1491	492
V-39	1492	493
V-54	1493	494
V-59	1494	495
V-71	1495	496

Table 5**Samples**

Diagnosis	No. of women
Normal/Benign	42*
DCIS	3
Invasive cancer	26

*From one woman, whole blood was collected at weeks 1,2,3,4,5 following menstruation. Hence, the number of unique normal/benign samples tested in the experiment is 75.

Information about women with breast cancer

Sample	AGE	Stage	Cancer type	Size hist. (mm)	Nodes
1	51	II	IDC	20	1/7
2	84	II	IDC	22	2/2
3	50	I	DCIS+ 1 IDC	>50 DCIS; 5 x 14	0/7
4	47	I	IDC	15	0
5	69	III	ILC g.2 + tubular adenocarcinoma	50 + 3	1 av 12 + 1 av 7
6	50	II	IDC	24	0
7	65	I	IDC	15	0
8	63	II	IDC	23	0
9	55	I	IDC + DCIS	4	0 av 1
10	52	0	DCIS + small colloid carcinoma foci	50 + 3	0
11	60	II	IDC	24	0
12	54	I	IDC	11	0
13		0	DCIS	20	0
14	49	0	DCIS	9	0
15	48	I	IDC	4	0
16	56	I	IDC	4	0
17	68	I	IDC	14	0
18	68	I	IDC	7	0
19	63	I	IDC	10	0
20	45	I	IDC	19	1
21	57	III	IDC	60	8/20
22	55	II	IDC/DCIS	35 + 55	0
23	71	I	IDC/extensive DCIS	8	0
24	56	I	ODC	9	?

25	66	II	IDC	26	0
26	66	I	IDC	15	?
27	61	I	IDC	9	?
28	?	?	?	?	0
29	65	I	IDC	11	0

Other diseases/conditions present in the women tested

Other diseases/conditions present in the women tested

Disease/condition
Diabetes
Asthma
Ulcerous colitis
Hemochromatose
Crohn's disease
Fibromyalgia
Psoriasis
Atopic eczema
Rheumatism
Allergies

Prior history of cancer in the women tested

Cancer type	No. of women
Breast	3
Colon	2
Stomach	1
Skin	1

- 116 -

Table 6

Number of samples tested by double cross validation and success of the diagnostic test for breast cancer based on selected informative genes

Number of samples tested by double cross validation

Number of unique samples tested	75
Number of unique non cancer samples tested	46
Number of cancer samples tested	29

Success of the diagnostic test for breast cancer based on selected informative genes

Occurrence in percentage*	Number of informative probes	Specificity	Sensitivity	Accuracy	False Positive rate	False negative rate	Total error rate
100.00	23	84.78	75.86	81.33	15.22	24.14	18.67
90.00	44	91.30	79.31	86.67	8.70	20.69	13.33
80.00	51	86.96	79.31	84.00	13.04	20.69	16.00
70.00	54	89.13	75.86	84.00	10.87	24.14	16.00
60.00	58	89.13	75.86	84.00	10.87	24.14	16.00
50.00	59	89.13	75.86	84.00	10.87	24.14	16.00
40.00	63	89.13	75.86	84.00	10.87	24.14	16.00
30.00	66	86.96	75.86	82.67	13.04	24.14	17.33
20.00	74	89.13	75.86	84.00	10.87	24.14	16.00
10.00	79	89.13	75.86	84.00	10.87	24.14	16.00
5.00	90	86.96	79.31	84.00	13.04	20.69	16.00
1.33	139	84.78	72.41	80.00	15.22	27.59	20.00

*100% = Genes appearing in all the 75 cross validated models; 90% = Genes appearing in at least 68 out of 75 cross validated models;
5% = Genes appearing in at least 4 out of 75 cross validated models; and so on.

Table 7

Double cross-validation and details of the success of the diagnostic test for Alzheimer disease based on the expression 182 informative genes

Validation Result		Success of diagnostic test		
		Performance	Description	%
Total number of samples tested	14	Accuracy	Percentage of the total number of predictions that were correct	92.9
Number of Alzheimer's disease samples tested	7	Sensitivity	Percentage of positive cases that were correctly identified	85.7
Number of Alzheimer's disease samples incorrectly predicted	1	Specificity	Percentage of negatives cases that were correctly predicted	100
Number of non-Alzheimer's disease samples tested	7	False positive rate	Percentage of negatives cases that were incorrectly classified as positive	0.0
Number of non-Alzheimer's disease samples incorrectly predicted	0	False negative rate	Percentage of positive cases that were incorrectly classified as negative	14.3
		Total error rate	Percentage of the total cases incorrectly predicted	7.1

Table 8

Some relevant features of the blood donors. B, Female donors with breast cancer; N, Female donors with suspected mammogram but no breast cancer; IDC, invasive ductal carcinoma; DCIS, ductal carcinoma in situ; na, not available nd, not determined; ++, no degradation of mRNA and no ribosomal contamination in the sample, +, no degradation of mRNA but ribosomal contamination in the sample.

		AGE	Cancer type/ breast abnormality	Size Hist. (mm)	mRNA Quality
1	B1	na	IDC	5	++
2	B2	49	DCIS	8	nd
3	B3	54	IDC	18	++
4	B4	59	IDC	12	+
5	B5	61	DCIS + micro invasive cancer	15+1.5	++
6	B6	55	IDC	12+17	nd
7	B6		IDC	12+17	nd
8	N1	45	Fibroadenoma	-	nd
9	N2	52	na	-	+
10	N3	55	Cyst	-	++
11	N4	54	na	-	++
12	N5	51	Benign ductal epithelium	-	nd
13	N6	57	Benign	-	nd
14	N7	50	na	-	++
15	N8	52	na	-	+

Table 9

List of sequences of probes informative for both alzheimer and breast cancer disease

Clone ID	Sequence ID	SEQ ID No. in sequence listing
I-24	308	11
I-25	309	12
I-28	310	13
I-48	321	19
I-60	327	25
I-72	333	Missing
I-81	338	31
I-82	339	32
II-02	360	33
II-03	361	34
II-06	364	36
II-07	365	37
II-10	368	39
II-21	378	45
II-23	380	46
II-24	381	47
II-25	382	48
II-27	384	50
II-33	390	55
II-34	391	56
II-41	397	60
II-42	398	61
II-46	401	64
II-47	402	65
II-48	403	66
II-52	406	68
II-57	411	73
II-58	412	74
II-59	413	75
II-60	414	76
II-61	415	77
II-62	416	78
II-64	418	80
II-67	421	83

Clone ID	Sequence ID	SEQ ID No. in sequence listing
II-69	423	85
II-70	424	86
II-74	428	90
II-80	434	96
II-82	436	98
II-84	438	99
II-87	441	100
II-88	442	101
II-96	450	105
III-01	452	106
III-02	453	107
III-06	458	109
III-08	460	111
III-12	463	114
III-13	464	115
III-17	468	Missing
III-18	469	116
III-21	471	117
III-23	473	119
III-24	474	120
III-25	475	121
III-26	476	122
III-27	477	123
III-28	478	124
III-29	479	125
III-32	482	127
III-33	483	128
III-35	485	130
III-39	487	131
III-40	488	132
III-42	489	133
III-45	492	135
III-46	493	136
III-47	494	137

III-48	495	138
III-56	503	144
III-57	504	145
III-58	505	146
III-59	506	147
III-61	507	148
III-62	508	149
III-63	509	150
III-64	510	151
III-66	512	152
III-67	513	153
III-70	515	154
III-74	518	155
III-75	519	156
III-78	521	157
III-80	523	158
III-81	524	159
III-85	526	161
III-86	527	162
III-88	529	163/164
III-89	530	165
III-93	532	166
III-95	534	168
III-96	535	Missing
IV-04	682	273
IV-13	683	274
IV-14	684	275
IV-17	685	276
IV-31	687	278
IV-32	688	279
IV-38	689	280
IV-42	691	282
IV-47	693	284
IV-61	696	286
IV-64	697	287
IV-72	699	289
IV-80	701	291
IV-85	702	292
IV-93	703	293

IV-96	705	295
V-03	706	296
V-04	707	297
V-07	708	298
V-08	709	299
V-12	711	301
V-24	714	303
V-41	718	305
V-57	720	307
V-61	721	308
V-64	722	309
V-65	723	Missing
V-74	724	310
V-80	726	311
VI-03	341	Missing
VI-04	342	Missing
VI-07	344	Missing
VI-08	345	Missing
VI-09	346	Missing
VI-12	869	341
VI-14	871	343
VI-19	349	Missing
VI-20	350	Missing
VI-21	351	Missing
VI-23	878	347
VI-25	353	Missing
VI-26	354	Missing
VI-48	359	Missing
VI-50	893	356
VI-53	895	357
VI-74	905	365
VI-76	907	367
VI-87	911	370
VI-88	912	371
VI-95	915	374
VII-02	547	Missing
VII-03	548	Missing
VII-06	551	Missing
VII-08	553	Missing

VII-09	554	Missing
VII-10	555	Missing
VII-11	556	Missing
VII-15	559	Missing
VII-17	560	Missing
VII-19	562	171
VII-21	564	173
VII-22	565	174
VII-23	566	175
VII-24	567	176
VII-27	568	177
VII-29	570	178
VII-32	571	179
VII-33	572	180
VII-36	575	182
VII-39	576	183
VII-41	578	185
VII-42	579	186
VII-43	580	187
VII-46	583	190
VII-48	584	Missing
VII-49	585	191
VII-54	589	195
VII-57	591	197
VII-58	592	198
VII-59	593	199
VII-62	594	200
VII-63	595	201
VII-64	596	202
VII-66	598	204
VII-72	600	206
VII-73	601	207
VII-77	604	Missing
VII-80	605	210
VII-82	607	212
VII-87	610	214
VII-90	612	216
VII-91	613	217

VII-92	614	218
VII-93	615	219
VII-96	617	220
VIII-09	618	221
VIII-10	619	222
VIII-13	622	224
VIII-16	624	225
VIII-20	628	229
VIII-21	629	230
VIII-23	630	231
VIII-24	631	232
VIII-25	632	233
VIII-28	634	235
VIII-29	635	236
VIII-30	636	237
VIII-31	637	238
VIII-32	638	239
VIII-33	639	240
VIII-34	640	Missing
VIII-38	643	243
VIII-40	644	244
VIII-41	645	245
VIII-46	649	249
VIII-48	651	251
VIII-55	656	256
VIII-57	658	258
VIII-59	660	259
VIII-60	661	260
VIII-61	662	Missing
VIII-64	663	261
VIII-66	665	262
VIII-73	672	267
VIII-74	673	268
VIII-76	675	270
VIII-80	679	272

- 280 -

Claims:

1. A set of oligonucleotide probes, wherein said set comprises at least 10 different oligonucleotides,
5 wherein each oligonucleotide is selected from:

an oligonucleotide having a sequence as set forth in SEQ
ID No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14,
15 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28,
10 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42,
43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56,
57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70,
71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84,
85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98,
15 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109,
110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120,
121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131,
132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142,
143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153,
20 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164,
165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175,
176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186,
187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197,
198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208,
25 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219,
220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230,
231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241,
242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263,
30 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274,
275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307,
308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318,
35 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329,
330, 331, 332, 333, 334, 335, 336, 337, 339, 341, 342,
343, 344, 345, 346, 347, 348, 351, 352, 353, 355, 356,

- 281 -

357, 359, 361, 363, 364, 365, 366, 367, 368, 369, 370,
371, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383,
384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394,
395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405,
5 406, 409, 411, 414, 415, 416, 418, 421, 422, 423, 424,
425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435,
436, 437, 438, 439, 440, 441, 444, 445, 447, 448, 451,
452, 454, 455, 458, 459, 460, 461, 463, 464, 465, 467,
468, 471, 472, 473, 474, 475, 476, 480, 481, 482, 484,
10 487, 489, 490, 496, 497, 498, 499, 500 or 501,

or an oligonucleotide derived from said sequence, or an
oligonucleotide with a complementary sequence, or a
functionally equivalent oligonucleotide.

15

2. A set of oligonucleotide probes as claimed in claim
1 wherein said oligonucleotide probes are each selected
from:

20 an oligonucleotide having a sequence as set forth in SEQ
ID No. 1, 2, 3, 4, 5, 11, 12, 13, 19, 25, 31, 32, 33,
34, 36, 37, 39, 45, 46, 47, 48, 50, 55, 56, 60, 61, 64,
66, 68, 73, 74, 75, 76, 77, 78, 80, 83, 85, 86, 90, 96,
98, 99, 100, 101, 105, 106, 107, 109, 111, 114, 115,
25 116, 117, 119, 120, 121, 122, 123, 124, 125, 127, 128,
130, 131, 132, 133, 135, 136, 137, 138, 144, 145, 146,
147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157,
158, 159, 161, 162, 163, 164, 165, 166, 168, 169, 171,
173, 174, 175, 176, 177, 178, 179, 180, 182, 183, 185,
30 186, 187, 190, 191, 195, 197, 198, 199, 200, 202, 204,
206, 207, 210, 212, 214, 216, 217, 218, 219, 220, 221,
222, 224, 225, 229, 230, 231, 232, 233, 234, 235, 236,
237, 238, 239, 240, 243, 244, 245, 249, 251, 256, 258,
259, 260, 261, 262, 267, 268, 270, 272, 273, 274, 275,
35 276, 278, 279, 280, 282, 284, 286, 287, 289, 291, 292,
295, 296, 297, 298, 299, 301, 303, 305, 307, 308, 309,
310, 311, 314, 315, 316, 317, 318, 319, 320, 321, 322,

- 282 -

323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333,
334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344,
345, 346, 347, 348, 349, 351, 352, 353, 355, 356, 357,
359, 361, 363, 364, 365, 366, 367, 368, 369, 370, 371,
5 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384,
385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395,
396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406,
408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418,
419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429,
10 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440,
441, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453,
454, 455, 457, 458, 459, 460, 461, 463, 464, 465, 466,
467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477,
478, 479, 480, 481, 482, 484, 487, 489, 490, 496, 497,
15 498, 499 or 501,

or an oligonucleotide derived from said sequence, or an
oligonucleotide with a complementary sequence, or a
functionally equivalent oligonucleotide.

20

3. A set of oligonucleotide probes as claimed in claim
1 wherein said oligonucleotide probes are each selected
from:

25 an oligonucleotide having a sequence as set forth in SEQ
ID No. 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18,
19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32,
33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46,
47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60,
30 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74,
75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88,
89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101,
102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112,
113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123,
35 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134,
135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145,
146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156,

- 283 -

157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167,
168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178,
179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200,
5 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211,
212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222,
223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233,
235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245,
246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256,
10 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267,
268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278,
279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289,
290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300,
301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311,
15 312, 313, 339, 341, 342, 343, 344, 345, 346, 347, 348,
350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360,
361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371,
372, 373, 374, 397, 398, 399, 400, 401, 402, 403, 404,
405, 406, 407, 409, 415, 445, 447, 448, 451, 452, 454,
20 455, 456, 458, 459, 460, 461, 462, 463, 464, 465, 467,
468, 471, 472, 473, 474, 475, 480, 481, 482, 483, 484,
485, 486, 487, 488, 491, 492, 493, 494, 495, 496, 500 or
501,

25 or an oligonucleotide derived from said sequence, or an
oligonucleotide with a complementary sequence, or a
functionally equivalent oligonucleotide.

30 4. A set of oligonucleotide probes as claimed in any
one of claims 1 to 3, wherein each probe in said set
binds to a different transcript.

5. A set as claimed in any one of claims 1 to 4
consisting of from 10 to 500 oligonucleotide probes.

35 6. An oligonucleotide probe wherein said probe is
selected from:

- 284 -

an oligonucleotide having a sequence as set forth in SEQ
ID No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14,
15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28,
29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42,
5 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56,
57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70,
71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84,
85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98,
99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109,
10 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120,
121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131,
132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142,
143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153,
154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164,
15 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175,
176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186,
187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197,
198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208,
209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219,
20 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230,
231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241,
242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263,
264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274,
25 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307,
308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318,
319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329,
30 330, 331, 332, 333, 334, 335, 336, 337, 339, 341, 342,
343, 344, 345, 346, 347, 348, 351, 352, 353, 355, 356,
357, 359, 361, 363, 364, 365, 366, 367, 368, 369, 370,
371, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383,
384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394,
35 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405,
406, 409, 411, 414, 415, 416, 418, 421, 422, 423, 424,
425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435,

- 285 -

436, 437, 438, 439, 440, 441, 444, 445, 447, 448, 451,
452, 454, 455, 458, 459, 460, 461, 463, 464, 465, 467,
468, 471, 472, 473, 474, 475, 476, 480, 481, 482, 484,
487, 489, 490, 496, 497, 498, 499, 500 or 501,

5

or an oligonucleotide derived from said sequence, or a
complementary sequence thereof.

10

7. A set of oligonucleotide probes as claimed in any
one of claims 1 to 5, or an oligonucleotide probe as
claimed in claim 6, wherein each of said oligonucleotide
probes is from 15 to 200 bases in length.

15

8. A set of oligonucleotide probes as claimed in any
one of claims 1 to 5 or 7 or an oligonucleotide probe as
claimed in claim 6 or 7, wherein the transcript to which
said probe binds is derived from a gene which is
constitutively moderately or highly expressed.

20

9. A set of oligonucleotide probes as claimed in any
one of claims 1 to 5, 7 or 8 or an oligonucleotide probe
as claimed in any one of claims 6 to 8, wherein said
probes are immobilized on one or more solid supports.

25

10. A set of oligonucleotide probes or an
oligonucleotide probe as claimed in claim 9, wherein
said solid support is a sheet, filter, membrane, plate
or biochip.

30

11. A polypeptide encoded by the mRNA sequence to
which an oligonucleotide as defined in claim 6 binds.

12. An antibody to a polypeptide as defined in claim
11.

35

13. A kit comprising a set of oligonucleotide probes
immobilized on one or more solid supports as defined in

- 286 -

claim 9 or 10.

14. A kit as claimed in claim 13 wherein said probes are immobilized on a single solid support and each
5 unique probe is attached to different region of said solid support.

15. A kit as claimed in claim 13 or 14 further comprising standardizing materials.

10

16. The use of a set of probes as described in any one of claims 1 to 5 or 7 to 10 or a kit as described in any one of claims 13 to 15 to determine the gene expression pattern of a cell which pattern reflects the level of
15 gene expression of genes to which said oligonucleotide probes bind, comprising at least the steps of:

- a) isolating mRNA from said cell, which may optionally be reverse transcribed to cDNA;
- b) hybridizing the mRNA or cDNA of step (a) to a
20 set of oligonucleotides or a kit as defined in any one of claims 1 to 5, 7 to 10 or 13 to 15; and
- c) assessing the amount of mRNA or cDNA hybridizing to each of said probes to produce said pattern.

25 17. A method of preparing a standard gene transcript pattern characteristic of a disease or condition or stage thereof in an organism comprising at least the steps of:

- a) isolating mRNA from the cells of a sample of one
30 or more organisms having the disease or condition or stage thereof, which may optionally be reverse transcribed to cDNA;

- b) hybridizing the mRNA or cDNA of step (a) to a set of oligonucleotides or a kit as defined in any one
35 of claims 1 to 5, 7 to 10 or 13 to 15 specific for said disease or condition or stage thereof in an organism and sample thereof corresponding to the organism and sample

- 287 -

thereof under investigation; and

- 5 c) assessing the amount of mRNA or cDNA hybridizing to each of said probes to produce a characteristic pattern reflecting the level of gene expression of genes to which said oligonucleotides bind, in the sample with the disease, condition or stage thereof.

18. A method of preparing a test gene transcript pattern comprising at least the steps of:

- 10 a) isolating mRNA from the cells of a sample of said test organism, which may optionally be reverse transcribed to cDNA;

- 15 b) hybridizing the mRNA or cDNA of step (a) to a set of oligonucleotides or a kit as defined in any one of claims 1 to 5, 7 to 10 or 13 to 15 specific for a disease or condition or stage thereof in an organism and sample thereof corresponding to the organism and sample thereof under investigation; and

- 20 c) assessing the amount of mRNA or cDNA hybridizing to each of said probes to produce said pattern reflecting the level of gene expression of genes to which said oligonucleotides bind, in said test sample.

25 19. A method of diagnosing or identifying or monitoring a disease or condition or stage thereof in an organism, comprising the steps of:

- 30 a) isolating mRNA from the cells of a sample of said organism, which may optionally be reverse transcribed to cDNA;
- b) hybridizing the mRNA or cDNA of step (a) to a set of oligonucleotides or a kit as defined in any one of claims 1 to 5, 7 to 10 or 13 to 15 specific for said disease or condition thereof in an organism and sample thereof corresponding to the organism and sample thereof under investigation;
- 35 c) assessing the amount of mRNA or cDNA

- 288 -

hybridizing to each of said probes to produce a characteristic pattern reflecting the level of gene expression of genes to which said oligonucleotides bind in said sample; and

5 d) comparing said pattern to a standard diagnostic pattern prepared as described in claim 17 using a sample from an organism corresponding to the organism and sample under investigation to determine the degree of

10 correlation indicative of the presence of said disease or condition or a stage thereof in the organism under investigation.

20. A method as claimed in any one of claims 17 to 19 wherein said mRNA or cDNA is amplified prior to step b).

15

21. A method as claimed in any one of claims 17 to 20 wherein the oligonucleotides and/or the mRNA or cDNA are labelled.

20

22. A method as claimed in any one of claims 17 to 21 wherein said probes are as defined in claim 3 and said disease is Alzheimer's disease.

23. A method as claimed in any one of claims 17 to 21 wherein said probes are as defined in claim 2 and said disease is breast cancer.

25

24. A method as defined in any one of claims 17 to 23, wherein said set of oligonucleotides as defined in any one of claims 1 to 5, 7 to 10 or 13 to 15 are replaced with a set of oligonucleotides which are randomly selected, preferably from a cDNA library.

30

25. A method of preparing a standard gene transcript pattern characteristic of a disease or condition or stage thereof in an organism comprising at least the

35

- 289 -

steps of:

a) releasing target polypeptides from a sample of one or more organisms having the disease or condition or stage thereof;

5 b) contacting said target polypeptides with one or more binding partners, wherein each binding partner is specific to a marker polypeptide (or a fragment thereof) encoded by the gene to which an oligonucleotide having a sequence as set forth in SEQ ID No. 1, 2, 3, 4, 5, 6, 7,
10 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77,
15 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137,
20 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192,
25 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247,
30 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302,
35 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335,

- 290 -

336, 337, 339, 341, 342, 343, 344, 345, 346, 347, 348,
351, 352, 353, 355, 356, 357, 359, 361, 363, 364, 365,
366, 367, 368, 369, 370, 371, 374, 375, 376, 377, 378,
379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389,
5 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400,
401, 402, 403, 404, 405, 406, 409, 411, 414, 415, 416,
418, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430,
431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441,
444, 445, 447, 448, 451, 452, 454, 455, 458, 459, 460,
10 461, 463, 464, 465, 467, 468, 471, 472, 473, 474, 475,
476, 480, 481, 482, 484, 487, 489, 490, 496, 497, 498,
499, 500 or 501 (or derived from said sequence) binds,
to allow binding of said binding partners to said target
polypeptides, wherein said marker polypeptides are
15 specific for said disease or condition thereof in an
organism and sample thereof corresponding to the
organism and sample thereof under investigation; and
c) assessing the target polypeptide binding to said
binding partners to produce a characteristic pattern
20 reflecting the level of gene expression of genes which
express said marker polypeptides, in the sample with the
disease, condition or stage thereof.

26. A method of preparing a test gene transcript
25 pattern comprising at least the steps of:

- a) releasing target polypeptides from a sample of
said test organism;
- b) contacting said target polypeptides with one or
more binding partners, wherein each binding partner is
30 specific to a marker polypeptide (or a fragment thereof)
encoded by the gene to which an oligonucleotide as
defined in claim 25 binds, to allow binding of said
binding partners to said target polypeptides, wherein
said marker polypeptides are specific for said disease
35 or condition thereof in an organism and sample thereof
corresponding to the organism and sample thereof under
investigation; and

- 291 -

c) assessing the target polypeptide binding to said binding partners to produce a characteristic pattern reflecting the level of gene expression of genes which express said marker polypeptides; in said test sample.

5

27. A method of diagnosing or identifying or monitoring a disease or condition or stage thereof in an organism comprising the steps of:

10 a) releasing target polypeptides from a sample of said organism;

b) contacting said target polypeptides with one or more binding partners, wherein each binding partner is specific to a marker polypeptide (or a fragment thereof) encoded by the gene to which an oligonucleotide as
15 defined in claim 25 binds, to allow binding of said binding partners to said target polypeptides; wherein said marker polypeptides are specific for said disease or condition thereof in an organism and sample thereof corresponding to the organism and sample thereof under
20 investigation; and

c) assessing the target polypeptide binding to said binding partners to produce a characteristic pattern reflecting the level of gene expression of genes which express said marker polypeptides in said sample; and

25 d) comparing said pattern to a standard diagnostic pattern prepared as described in claim 25 using a sample from an organism corresponding to the organism and sample under investigation to determine the degree of correlation indicative of the presence of said disease
30 or condition or a stage thereof in the organism under investigation.

28. A method as claimed in any one of claims 17 to 27 wherein said pattern is expressed as an array of numbers
35 relating to the expression level associated with each probe.

- 292 -

29. A method as claimed in any one of claims 17 to 28 wherein said organism is a eukaryotic organism, preferably a mammal.

5 30. A method as claimed in claim 29 wherein said organism is a human.

31. A method as claimed in any one of claims 17 to 30 wherein the data making up said pattern is
10 mathematically projected onto a classification model.

32. A method as claimed in any one of claims 17 to 31 wherein said disease is cancer or a degenerative brain disorder.

15 33. A method as claimed in any one of claims 17 to 32 wherein said sample is tissue, body fluid or body waste.

34. A method as claimed in any one of claims 17 to 33
20 wherein said sample is peripheral blood.

35. A method as claimed in any one of claims 17 to 34 wherein the cells in the sample are not disease cells, have not been in contact with such cells and do not
25 originate from the site of the disease or condition.

36. A method as claimed in any one of claims 19 to 35 for the diagnosis, identification or monitoring of two or more diseases, conditions or stages thereof in an
30 organism, wherein said pattern produced in step c) is compared to at least two standard diagnostic patterns prepared as described in claim 17 or 25, wherein each standard diagnostic pattern is a pattern generated for a different disease or condition or stage thereof.

35 37. A method of identifying probes useful for diagnosing or identifying or monitoring a disease or

- 293 -

condition or stage thereof in an organism, comprising the steps of:

- 5 a) immobilizing a set of oligonucleotide probes, preferably as described hereinbefore, on a solid support;
- b) isolating mRNA from a sample of a normal organism (normal sample), which may optionally be reverse transcribed to cDNA;
- 10 c) isolating mRNA from a sample from an organism, corresponding to the sample and organism of step (b), which is known to have said disease or condition or a stage thereof (diseased sample), which may optionally be reverse transcribed to cDNA;
- 15 d) hybridizing the mRNA or cDNA of steps (b) and (c) to said set of immobilized oligonucleotide probes of step (a); and
- e) assessing the amount of mRNA or cDNA hybridizing to each of said oligonucleotide probes to determine the level of gene expression of genes to which said oligonucleotide probes bind in said normal and diseased samples to generate a gene expression data set for each sample;
- 20 f) normalizing and standardizing said data set of step (e);
- g) constructing a calibration model for classification, preferably using the statistical techniques Partial Least Squares Discriminant Analysis (PLS-DA) and Linear Discriminant Analysis (LDA);
- 30 h) performing JackKnife analysis and identifying those oligonucleotide probes which are required for classification of said disease and normal samples into their respective groups.
- 35